



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2014-0625; Directorate Identifier 2014-NM-044-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-2A12 (CL-601), and CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes. This proposed AD was prompted by a report of an aft equipment bay fire due to chafing and subsequent arcing of the integrated drive generator (IDG) power cables. Additionally, we have received several reports of broken support brackets of the hydraulic lines. This proposed AD would require a one-time inspection of the IDG power cables for chafing, and for any cracked or broken support bracket of the hydraulic line; and corrective actions if necessary. We are proposing this AD to detect and correct broken support brackets of the hydraulic lines, which could result in inadequate clearance between the IDG power cables and hydraulic lines and chafing of the IDG power cables, and consequent high energy arcing and an uncontrolled fire in the aft equipment bay.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Bombardier, Inc., 400 Côte Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514 855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0625; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any

comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Assata Dessaline, Aerospace Engineer, Avionics and Service Branch, ANE-172, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7301; fax (516) 794-5531.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2014-0625; Directorate Identifier 2014-NM-044-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

**Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for

Canada, has issued Canadian Airworthiness Directive CF-2014-05, dated January 20, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

There has been one reported case on the CL-600-2B19 aeroplane of an aft equipment bay fire occurring due to arcing of chafed integrated drive generator (IDG) power cables. Additionally, the hydraulic line support brackets located at the fuselage station (FS) 672 and FS 682 on a CL-600-2B19 aeroplane could result in inadequate clearance between the IDG power cables and hydraulic lines, potentially resulting in chafing of the IDG power cables. Chafed IDG power cables can generate high energy arcing, which can result in an uncontrolled fire in the aft equipment bay.

It was found that a similar configuration exists on models CL-600-2A12 and CL-600-2B16 aeroplanes. Therefore, a similar unsafe condition exists.

This [Canadian] AD mandates the detailed visual inspection and, if required, rectification of the IDG power cables and hydraulic line support bracket.

Required corrective actions include repair or replacement of the IDG power cable if any chafing is found, and replacement of any cracked or broken support bracket.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2014-0625.

#### **Relevant Service Information**

Bombardier has issued the following service information:

(1) Bombardier Service Bulletin 605-24-007, Revision 01, dated January 13, 2014 (for Model CL-600-2B16 airplanes);

(2) Bombardier Service Bulletin 604-24-026, Revision 01, dated January 13, 2014 (for Model CL-600-2B16 airplanes); and

(3) Bombardier Service Bulletin 604-0625, Revision 01, dated January 13, 2014 (for Model CL-600-2A12 and CL-600-2B16 airplanes).

The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

#### **FAA's Determination and Requirements of this Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### **Costs of Compliance**

We estimate that this proposed AD affects 95 airplanes of U.S. registry.

We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$8,075, or \$85 per product.

We have received no definitive data that would enable us to provide cost estimates for the on-condition repair of chafed power cables or cracked or broken support brackets, as specified in this AD.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. Amend § 39.13 by adding the following new airworthiness directive (AD):

**Bombardier, Inc.:** Docket No. FAA-2014-0625; Directorate Identifier 2014-NM-044-AD.

**(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Bombardier, Inc. airplanes identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category.

(1) Model CL-600-2A12 (CL-601) airplanes, serial numbers 3001 through 3066 inclusive.

(2) Model CL-600-2B16 (CL-601-3A, CL-601-3R Variants) airplanes, serial numbers 5001 through 5194 inclusive.

(3) Model CL-600-2B16 (CL-604 Variant) airplanes, serial numbers 5301 through 5665 inclusive, and 5701 through 5934 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 24, Electrical Power.

**(e) Reason**

This AD was prompted by a report of an aft equipment bay fire due to chafing and subsequent arcing of the integrated drive generator (IDG) power cables. Additionally, we have received several reports of broken support brackets of the hydraulic lines. We are issuing this AD to detect and correct broken support brackets of the hydraulic lines, which could result in inadequate clearance between the IDG power cables and hydraulic lines and chafing of the IDG power cables, and consequent high energy arcing and an uncontrolled fire in the aft equipment bay.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) One-Time Inspection and Corrective Actions**

Within 400 flight hours or 18 months after the effective date of this AD, whichever occurs first: Perform a one-time detailed inspection of the IDG power cables for chafing between the cables and the adjacent hydraulic and pneumatic lines, and for



any cracked or broken support bracket of the hydraulic lines, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD. If any chafing of the power cables or any cracked or broken support bracket is found, before further flight, repair or replace, as applicable, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(1) Bombardier Service Bulletin 605-24-007, Revision 01, dated January 13, 2014 (for Model CL-600-2B16 airplanes).

(2) Bombardier Service Bulletin 604-24-026, Revision 01, dated January 13, 2014 (for Model CL-600-2B16 airplanes).

(3) Bombardier Service Bulletin 601-0625, Revision 01, dated January 13, 2014 (for Model CL-600-2A12 and CL-600-2B16 airplanes).

**(h) Credit for Previous Actions**

This paragraph provides credit for action required by paragraph (g) of this AD, if the action was performed before the effective date of this AD using Bombardier Service Bulletin 605-24-007, 604-24-026, or 601-0625, all dated September 18, 2012, provided that the action specified in Service Request for Product Support Action (SRPSA) 27512, SRPSA 30806, SRPSA 32727, SRPSA 32864, or SRPSA 33161 has not been done. Bombardier Service Bulletins 605-24-007, 604-24-026, and 601-0625, all dated September 18, 2012, are not incorporated by reference in this AD.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or Transport Canada Civil Aviation (TCCA), or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2014-05, dated January 20, 2014, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2014-0625.

(2) For service information identified in this AD, contact Bombardier, Inc., 400 Côte Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514 855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on September 9, 2014.

Jeffrey E. Duven,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

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